

# Cisco Network Optimization Service

Optimize your network for borderless business evolution and innovation using Cisco® expertise and leading practices.

## New Expanded Smart Analytics Offerings

Smart analytics automated analysis and reporting capabilities provide visibility into network performance and enable you to quickly translate network data into actionable business intelligence.

The Network Optimization Service now features three offerings that use smart analytics to enhance your visibility into the state of your network.



### Network Performance Analytics

Increase your visibility into areas of network health, quality, and compliance that require attention and focus. Simplify tracking and reporting of progress against your network improvement plan and change initiatives.

### Network Maturity Benchmarking Analytics

Identify opportunities for operational and technology improvement by seeing where your network stands against anonymous peer networks.



### Network Deployment and Incident Trending Analytics

Gain easy access in a graphical format to the quantitative deployment and performance data you need to:

- See what is running on your network.
- More effectively manage network consistency and complexity.
- Improve configuration compliance.
- Identify the causes of network disruption.
- Benchmark network disruptions in detail relative to anonymous peers.

## Service Overview

### Optimizing Today's Business Architecture

Today, enabling business innovation and agility is about being able to communicate and work with anyone, anywhere, using any device. Cisco has created a next-generation architecture called Borderless Networks to deliver this new workplace experience securely, reliably, and seamlessly.

The Cisco Borderless Network is a tightly integrated architecture that delivers end-to-end network services (including multimedia collaboration, energy management, access control, mobility, and application performance) to provide a superior user experience.

An evolution beyond networks with limited integration and interoperability, the Borderless Network is built on a converged infrastructure based on secure routing, switching, and mobility.

As you converge network services across applications, devices, and technologies, the need to prepare the foundational network (and the teams supporting it) for business innovation has never been greater.

### Ready, Better, Smarter: Helping Your Team Prepare, Improve, and Succeed

To help you optimize your network for borderless business evolution, the Cisco Network Optimization Service combines assessments and guidance, expert support, improved visibility and insight, and continual learning in a tightly integrated subscription package that is as comprehensive as it is flexible.

The service focuses on optimizing your secure wired and wireless networks and supporting your team in three essential ways:

- **Ready:** Identify gaps; prepare to manage change, network resiliency, and the software lifecycle, and align with design goals, by receiving assessments and guidance.
- **Better:** Get better performance from your network through expert support for interpreting and responding to the results of audits and analyses, managing changes, and resolving operational gaps.
- **Smarter:** Make better-informed IT investment decisions by improving your visibility and insight into the state of your network. Build knowledge and skills throughout the entire engagement with ongoing knowledge transfer and learning from Cisco experts.

“The Cisco Services agreement gives us access to outstanding people and a breadth of expertise, knowledge, and support. This is what enables us to continue to evolve our capabilities and service offerings faster and with higher quality than if we were trying to do it on our own.”

– Glenn Ward, SVP, Network Operations, Bell Canada

## Five Coordinated Strategies

We help you get ready, better, and smarter through five coordinated, interdependent, and interconnected strategies:

- **Change management strategy:** Understand what you need to do to prepare your network and team to support new solutions and applications and receive support and access to learning resources as you implement change.
- **Hardware strategy:** More effectively manage network resiliency (the ability to maintain an acceptable level of service in the face of faults and challenges to normal operation) and reduce exposure to issues.
- **Software strategy:** Improve your software management practices to be ready to support new requirements.
- **Network management strategy:** Build a network management roadmap toward alignment with your network management goals and requirements.
- **Design strategy:** Validate that proposed changes are aligned with your design goals, that you are truly ready to modify your existing architecture or design, and that your testing strategy and capabilities can support your testing needs.

## Ready: Assessments and Guidance

When you are planning to introduce new technologies and applications into your network environment, assessments and reviews help you understand what you need to do to prepare your network environment. All assessments and reviews result in reports that summarize findings and recommendations for closing gaps relative to leading practices and making better-informed IT investment decisions. (See Table 1.)

The typical Network Optimization Service delivery team has decades of combined experience, with specialization in areas such as IP telephony, security and VPN, IP contact center, content delivery, mobile wireless, wireless LAN, optical, multicast, quality of service, data center, network management, and operations.

**Table 1.** Network Assessment Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Change management strategy	<b>IPv6 device readiness assessment:</b> Assess your Cisco network devices to determine which can support IPv6 in their current state, which need upgrades to support IPv6, and which cannot support IPV6.	Establish your network IPv6 readiness baseline to prepare for IPv6 adoption.
	<b>IPv6 architecture strategy review:</b> Align IPv6 to your network architecture and business requirements through a combination of onsite and remote strategy review sessions.	Determine IPv6 investment priorities in alignment with your objectives and capabilities.
	<b>Network device security assessment:</b> Identify gaps in device configurations and policies with this rules-based assessment. Collected data is analyzed and compared to leading practices. Receive a prioritized remediation report.	Reduce the risk to your IT infrastructure posed by network and firewall devices that are not secure.
	<b>Operations risk management assessment:</b> Review your operational processes pertaining to 14 areas of service management critical to network availability.	Equip your staff to more effectively manage the network by receiving recommendations for improving operational or service management processes.

Strategy	Deliverables	Benefits: Helps You To ...
Hardware strategy	<b>Medianet readiness assessment:</b> Assess readiness of the network for implementation of rich media applications based on a thorough analysis of the current infrastructure and the video applications to be supported.	Successfully implement rich media applications and realize the full value of a video technology investment.
	<b>Unified communications operations support planning workshop:</b> Review your proposed unified communications high-level design and solution requirements and analyze the readiness of the current network and/or voice infrastructures.	Identify opportunities to improve your operations staff's ability to support a Cisco Unified Communications solution, as well as your support infrastructure, processes, and tools.
	<b>Network resiliency assessment:</b> Review your architecture or design and analyze resiliency requirements for strategic locations within the IP infrastructure.	Understand what is needed to achieve the right level and balance of resiliency and complexity.
Software strategy	<b>Software management strategy review:</b> Analyze your current practices related to establishing and managing software release standards, software migration triggers, and the lifecycle of software in your network.	Understand how to improve your software management practices in alignment with your objectives.
Network management strategy	<b>Network management architecture roadmap review:</b> Review and analyze your network management architecture, goals, and capabilities.	Understand what is needed to achieve alignment with your network management goals and requirements.
Design strategy	<b>Design review:</b> Review your design priorities and goals, and requirements for modifying your existing architecture or design.	Validate that proposed changes meet design goals and objectives.
	<b>Test cycle and review:</b> Test applications and technologies in Cisco lab testing facilities based on review of your business requirements and objectives.	Validate that changes to your infrastructure are aligned with your business objectives.
	<b>Testing and lab strategy review:</b> Review your network test environment, resources, and goals. Analyze your current testing practices and lab strategy.	Improve your lab testing methodologies.

## Better: Expert Support

Get better performance from your network with a network improvement plan in place and Cisco expert support for closing gaps and preemptively addressing issues. (See Table 2.)

The network optimization engineers you work with know your network and add even more value with access to the right experts for your exact needs. With more than 2400 Advanced Services engineers, more than 1500 holders of CCIE® certification, 15 specialized practices, and 15 Advanced Services solution teams, we can address the most challenging questions that arise in optimizing your network.

**Table 2.** Network Support Activities and Benefits

Strategy	Activities	Benefits: Helps You To ...
Change management strategy	<b>Scheduled change support:</b> Collaboratively evaluate the potential effects of proposed major network changes and provide guidance during change implementation.	Improve your success in implementing proposed changes.
	<b>Availability and operations gap resolution support:</b> Review your gap resolution plans and support your efforts to resolve identified operational gaps that might affect availability.	More effectively manage changes to your network by reviewing your implementation procedures and providing remote assistance in efforts to resolve problems that might occur.
	<b>Onsite network optimization support:</b> Provide ongoing onsite support for Cisco Network Optimization Service delivery.	Enhance the integration of Network Optimization Service value into your day-to-day workflow.
	<b>Onsite network consulting support:</b> Provide ongoing onsite technical or project management leadership.	
	<b>Ongoing flexible support:</b> Provide support for additional Cisco Advanced Services subscription program requirements not foreseen at the beginning of the NOS contract period or engagement, such as additional design, software management, or network management.	Improve ability to respond to needs not anticipated at the beginning of the contract period.
	<b>Ongoing escalation engineering support:</b> Provide technical and non-technical context to the Cisco Technical Assistance Center or High-Touch Technical Support Service engineers working to aid in restoring service on your network.	Speed service restoration with support from someone intimately knowledgeable of your network and business.

Strategy	Activities	Benefits: Helps You To ...
Hardware strategy	<b>Ongoing hardware support:</b> Integrate hardware strategy deliverables.	Improve hardware performance and reduce exposure to issues through support to help you understand and respond to device information pertinent to your security, wireless, and wired network standards.
Software strategy	<b>Ongoing software support:</b> Integrate software strategy deliverables.	Mitigate risk, manage complexity, and improve functionality with support pertaining to features and interoperability of software planned for or in use in your wired and wireless network.
Network management strategy	<b>Ongoing network management support:</b> Integrate network management strategy deliverables.	Improve network stability through assistance with network management instrumentation and support for resolving repeating issues identified through syslog analysis.
Design strategy	<b>Ongoing design support:</b> Provide ongoing design support for incremental changes to your borderless network infrastructure.	Improve network stability through support for maintaining and evolving your design standards. Make the network more predictable through guidance for tuning it in accordance with your design goals. More effectively respond to issues that arise when you make changes to the network or how it is used.

### Smarter: Visibility, Insight, and Learning

Getting smarter is about gaining better visibility into the state of your network through service capabilities that gather information from your devices and network, combine it with Cisco expertise, and create actionable intelligence. This intelligence creates the basis for an ongoing conversation, helping you to reduce costs, mitigate risks, and speed innovation. Getting smarter is also about your team becoming more self-sufficient through knowledge transfer and learning opportunities.

#### Visibility and Insight Through Smart Analytics

Quickly translate network data into actionable business intelligence through audits, analysis, and reporting using smart analytics. Three offerings within the Network Optimization Service use the power of smart analytics to enhance your visibility into the state of your network, all delivered using an easy-to-use Cisco.com portal:

- Network performance analytics (new)
- Network maturity benchmarking analytics (new)
- Network deployment and incident trending analytics

#### Network Performance Analytics

Help improve your compliance with policies and best practices and better prioritize staff allocation by quickly identifying exceptions through a holistic view of your network that draws on hardware, software, security, and syslog data.

Network performance analytics consists of an automated network improvement plan delivered through our Smart Analytics portal. (See Figure 1.)

- Address your highest business priorities and operational risks, and focus resources more effectively, with a prioritized action plan.
- Increase your visibility into areas of network health, quality, and compliance that require attention and focus.
- Manage change and track improvement across hardware, software, and network management strategies.
- See the overall state of your network at a glance and measure and track network health and compliance over time; content is refreshed with each upload to our secure, proprietary network data collector.
- Simplify executive reporting of global key performance indicators.

**Figure 1.** Network Performance Analytics



Track progress on implementing improvements recommended through deliverables organized under the categories compliance, risk, and problem management. The benchmarking capability, in the lower right, is available separately within the network maturity benchmarking analytics offering (described in Table 4).

Network performance analytics aggregates the output of a set of reports that have historically been delivered only through traditional analysis and reporting. (See Table 3.)

**Table 3.** Network Performance Analytics: Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Change management strategy	<b>Network improvement plan:</b> Compiles recommendations from the key performance and network maturity benchmarking deliverables into a single plan; measures and tracks network improvements.	Prioritize network improvement efforts and quantify progress.
Hardware strategy	<b>Hardware field notice report:</b> Analyzes Cisco field notices for issues with potential to affect your network devices.	Gain insight into known hardware issues with automated field notice analysis.
	<b>Technology or protocol audit:</b> Analyze network device metrics pertaining to hardware inventory, stability, performance, configuration, and faults.	Proactively identify issues that might affect performance and stability through data collection and trending.
	<b>Hardware EoX report:</b> Provides personalized information about Cisco product family milestones such as end of sale, end of engineering, and end of life.	Manage obsolescence by receiving advance notice of product milestones for covered equipment in your network. Budget ahead for capital replacements. Plan for replacement support.
Software strategy	<b>Custom configuration report:</b> Compares your networking device configurations to your device configuration template standards.	Improve configuration consistency and standardization through recommendations for modifying device configuration attributes.
	<b>Configuration best practices report:</b> Analyzes device configurations for technology and software features, protocols, and network management.	Improve visibility to your software release standard conformance. Identify potential security and interface configuration risks. Improve protocol configurations and consistency and device manageability.
	<b>Software infrastructure analysis report:</b> Analyzes your software diversity and conformance to your software release standards and notifies you of release milestones.	Reduce network complexity by receiving the information you need to identify the fewest possible Cisco IOS® Software releases for your network equipment while fulfilling various topology roles for your infrastructure.
	<b>Software security alert:</b> Analyzes Cisco security advisories for issues with potential to affect your network and offers remediation advice specific to your environment.	Improve network resiliency and security with timely security advisories.
Network management strategy	<b>Syslog analysis report:</b> Analyzes collected syslog messages for event correlation, device health, and baseline metrics.	Improve network stability by analyzing system trends to identify repeating, unresolved issues.

## Network Maturity Benchmarking Analytics

Identify opportunities for improvement by seeing where your network stands against anonymous peer networks similar in size and with similar architectures.

**Table 4.** Network Maturity Benchmarking Analytics: Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Change management strategy	<b>Network maturity benchmarking analytics:</b> Compares your deployed configuration compliance, hardware and software lifecycle milestones, software version conformance, and technology plan at a high level against an anonymous industry peer and overall industry vertical.	<ul style="list-style-type: none"><li>• Identify the general direction in which to evolve your network to improve operational and technology maturity.</li><li>• Make better-informed decisions about how to improve your network through peer comparison.</li></ul>

## Network Deployment and Incident Trending Analytics

Help improve network availability and stability by gaining easy access to quantitative deployment and performance data in a graphical format. (See Figure 2.)

This visibility helps you to:

- See what is running on your network.
- Manage network consistency and complexity.
- Improve configuration compliance.
- Identify the causes of network disruption.
- Benchmark network disruptions in detail relative to anonymous peer organizations similar in size and with similar network architectures.
- Foresee the effects of planned changes to your network.

**Figure 2.** Network Deployment and Incident Trending Analytics



In one glance, see deployment and performance data, including device functional role comparisons, exceptions to established policies and configurations, factors contributing to poor network performance, effects of changes in the network, and comparison to peer networks.



Data is captured at a single point in time using our secure, proprietary network data collector. (See Table 5.)

**Table 5.** Network Deployment and Incident Trending Analytics: Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Change management strategy	<b>Network incident trending analytics:</b> Analyze, track, and flag trends in technical support activity to understand the causes of disruptions and benchmark your incident management trends relative to anonymous industry peers.	More effectively address sources of network disruption by gaining visibility to root causes.
Hardware strategy	<b>Hardware deployment analytics:</b> Analyze the consistency and complexity of your hardware deployment.	Reduce network risk and simplify troubleshooting and management by verifying that identical devices performing the same role are configured consistently. Identify opportunities for network improvement by assessing deployment consistency and complexity.
Software strategy	<b>Software deployment analytics:</b> Analyze the consistency and complexity of your software release deployment.  <b>Software feature deployment analytics:</b> Analyze the consistency and complexity of your software feature deployment.	

### Visibility and Insight Through Traditional Analysis and Reporting

Help improve device and network performance, stability, reliability, and functionality by receiving guidance on choosing the right software versions and engineering recommendations for your network standards. Gain insight into potentially unmanaged devices on your network and better visibility to your network topology. (See Table 6.)

**Table 6.** Traditional Analysis and Reporting: Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Hardware strategy	<b>Unidentified inventory report:</b> Identify networking devices believed to be attached to your network but missing from managed inventory.	Improve visibility to possible points of uncontrolled network access by identifying potentially unmanaged devices.
	<b>Engineering recommendation report:</b> Provide engineering recommendations for your network standards for device stability, performance, or tuning.	Improve device performance and stability by identifying trends and providing recommendations for modifying device, feature, and/or protocol attributes.
Software strategy	<b>Proactive software recommendation report:</b> Collaboratively identify the right software version to meet your hardware platform and functionality requirements.	Improve network performance, reliability, and functionality by receiving the information you need to deploy the right software releases for your network.
Design strategy	<b>Topology diagram report:</b> Graphically depict connectivity and spatial relationships of your production configurations per device.	More effectively visualize and communicate about your network topology.

### Knowledge Transfer and Learning

Build knowledge and hone skills throughout the entire Network Optimization Service engagement by receiving ongoing knowledge transfer and learning. (See Table 7.)

**Table 7.** Knowledge Transfer and Learning: Deliverables and Benefits

Strategy	Deliverables	Benefits: Helps You To ...
Change management strategy	<b>Remote knowledge transfer session:</b> Two- to four-hour online distance-learning opportunities across multiple sites, for situations that do not require more formal learning.	Improve team self-sufficiency through Cisco experts sharing knowledge, best practices, and intellectual property through formal and informal learning opportunities
	<b>Technical Knowledge Library:</b> Unlimited Cisco.com access to knowledge content for Cisco products and technologies. Includes proprietary Cisco documentation, e-learning, and self-study resources.	
	<b>Virtual training session:</b> Remotely deliver a training session on a topic you request; typically two sessions four to six hours in duration, with remote lab access if needed.	

## Tracking Value Against Your Success Metrics

It is critical that the value you receive from Cisco Network Optimization Service remains in continual alignment with your company's goals and success metrics. Cisco provides periodic business reviews to keep you and your management informed. In addition, smart analytics capabilities enable you to measure and track disruption trends and network improvement against your key performance indicators.

**“Our availability has easily increased ten-fold. There are no more outages, no more tickets to deal with, and no more coordinating fixes. As a result, we can now concentrate our resources toward more value-added tasks versus constant troubleshooting.”**

– Director, Data Development Cisco Customer, Telecommunications, Service Provider

## Optimizing Beyond the Foundation

Additional Cisco Optimization Services can be purchased to support other advanced technologies on your converged network, including:

- **Borderless networks:** Wireless LAN, security
- **Data center:** Strategy and architecture assessments, application distribution and delivery, application network performance, unified computing systems, storage area networks, unified fabric (switching)
- **Collaboration:** IP communications, Cisco Customer Care, Cisco TelePresence® conferencing

The Cisco Network Optimization Service supports the security of devices and business data on your Cisco network and the performance of your integrated Cisco wired and wireless network. If you have more specialized security or wireless LAN requirements, we recommend purchasing a Cisco Security Optimization Service or Cisco Wireless LAN Optimization Service contract in addition to your Cisco Network Optimization Service contract:

- If you have a multiyear security strategy (for example, a global network access strategy or remote worker strategy), we recommend purchasing a Cisco Security Optimization Service contract.
- If you require consultative support for very large wireless LAN installations or for using wireless applications and mobility services, we recommend the purchase of a Cisco Wireless LAN Optimization Service contract.

## Why Cisco Services

Realize the full business value of your technology investments with smart, personalized services from Cisco and our partners. Backed by deep networking expertise and a broad ecosystem of partners, Cisco Services enable you to successfully plan, build, and run your network as a powerful business platform. Whether you are looking to quickly seize new opportunities to meet rising customer expectations, improve operational efficiency to lower costs, mitigate risk, or accelerate growth, we have a service that can help you.

## Cisco and Partner Expertise: Better Together

Cisco engineers and Cisco Certified Partners are among the industry's elite in providing integrated, collaborative, adaptive solutions. Jointly with our partners, we form the largest collection of industry certified experts in the world supporting the most complex networks to meet and exceed the needs of our customers. Cisco teams can collaborate with partners to foster consistency and alignment with Cisco methodologies, tools, and leading practices.



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## Availability and Ordering

The Cisco Network Optimization Service is available globally and can be purchased from Cisco and Cisco Certified Partners. Service delivery details might vary by region and depending on which subscription options you choose.

## For More Information

For more information about the Network Optimization Service and to read a commissioned study from Forrester Consulting, "The Total Economic Impact™ of Cisco Network Optimization Service," visit [www.cisco.com/go/optimize](http://www.cisco.com/go/optimize).



Cisco services. smarter *together* 

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